Patient Movement Item Tracking System (PMITS) PlexusD

Module 5: Data Exchange

Student Guide

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Module 5: Data Exchange

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1. Introduction

The **Data Exchange** process allows you to send and receive asset tracking data between other PMITS PlexusD Automated Information System (AIS) devices.

You may select to either send or receive data.

The following topics are covered in this module:

- The communications requirements of the PMITS PlexusD application on the workstation and the web.
- Accessing the methods for exchanging data files with other users.
- Accessing the method for receiving data exchange files.

2. Objectives

At the end of this module, you will be able to accomplish the following:

- Describe the communications requirements of the PMITS PlexusD application on the workstation.
- Describe and access the various methods for exchanging data with other systems.
- Describe and access the method for receiving data from other systems.

3. Communications Requirements of PMITS PlexusD

Data Exchange files can be sent via, disk, e-mail, Internet (HTTP), modem, or Expeditionary Framework (EF). (All options may not be available.)

For instructions on selecting which Data Exchange methods to allow, refer to the PMITS PlexusD System Administration Guide for the Workstation.

Requirements are as follows:

- **Analog Phone Line** – An analog phone line is necessary if your site plans on sharing data from your workstation via modem and phone line.
- **Internet connection on the PMITS PlexusD Workstation** – An internet connection is necessary if your site plans on sharing data from your workstation via internet.

The system is capable of storing phone numbers, e-mail addresses, and Web URL's so that you are not required to input this information each time a Data Exchange file is sent.

Note: The PMITS PlexusD Website can be accessed from any computer with an internet connection and **.mil** access. (The website does not have to be accessed from a PMITS PlexusD Single Site or Data Collection Hub Workstation.)

4. Exchanging Data with Other PMITS PlexusD Systems

The **Data Exchange** selection allows you to send and receive data between other PMITS PlexusD AIS devices.

To send, select the method of sending, e.g., disk, Internet (HTTP), or modem. Select the target device for which the data exchange file is being created, and then select a directory on the computer to hold the file until the file transfer is completed, i.e., browse a storage directory for disk, a Web Uniform Resource Locator (URL) for Internet (HTTP), or the phone number for modem. You initiate the process and are notified when the process is complete.

The system only sends the records that have been changed since the last time a Data Exchange file was sent to that user. The system keeps track of this by logging a **Last Transfer Date** for the device (in the **Setup** section in the **Devices** tab) each time a Data Exchange file is made for them.

Note: It is important that the **Last Transfer Date** be set the first time you send to a new device to avoid sending the entire database (which the other device will already have). For information on setting the **Last Transfer Date** when sending to a new device for the first time, see the PMITS PlexusD System User Manual.

4.1 Send Data Exchange File Via Disk

	Step	Result
	1. Insert a USB drive into the computer and sign on to **PlexusD.**	The **PlexusD** main menu appears as shown in Figure 5-1.

Step	Result
2. Click [**Data Exchange**]. See Figure 5-1.	The **Data Exchange** drop down menu appears as shown in Figure 5-2.

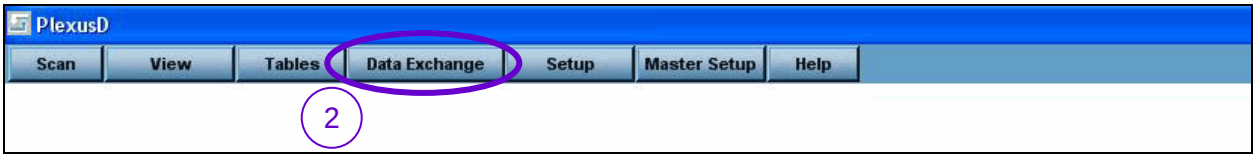


Figure 5-1. Data Exchange Selected on the Main Menu Screen

Figure 5-2. Data Exchange Drop Down Menu

Step	Result
3. Click [**Send**]. See Figure 5-2.	The **Data Exchange** screen appears as shown in Figure 5-3.
4. Click [**Disk**] from the **Method** drop down menu. See Figure 5-3.	**Disk** appears in the **Method** field.

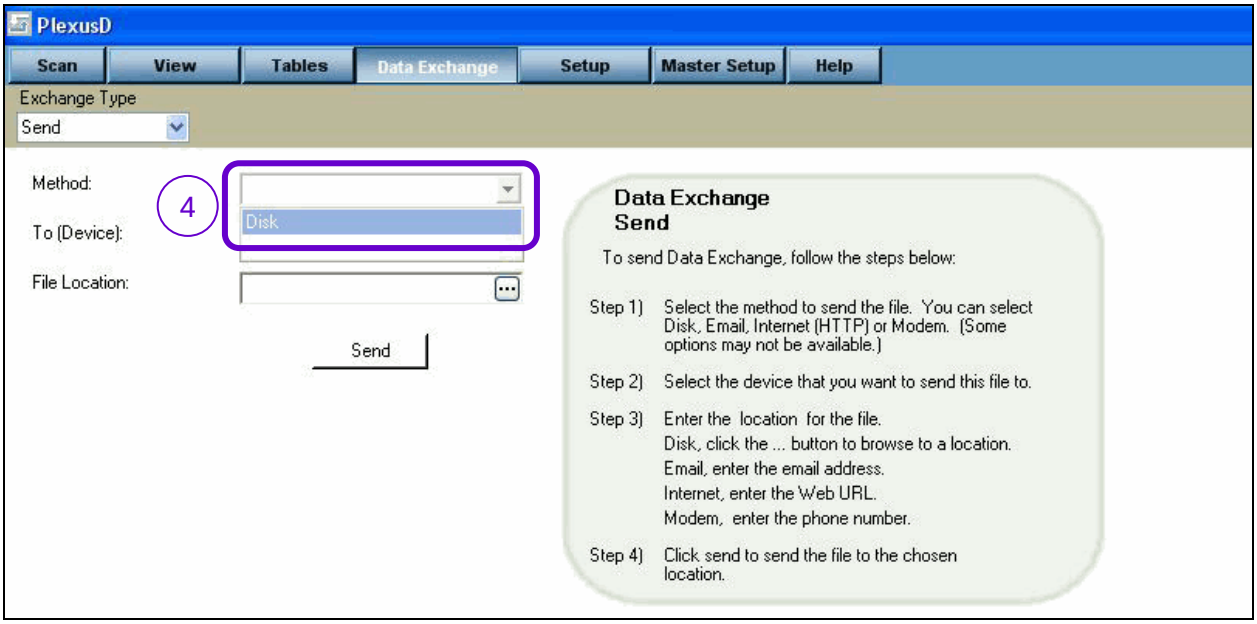


Figure 5-3. Method Drop Down Menu on the Data Exchange Screen

Note: If there is an entry in the history grid at the bottom of the screen (see Figure 5-4) with the appropriate **To (Device)**, **Method**, and **File To**, you can click the entry to automatically populate the fields.

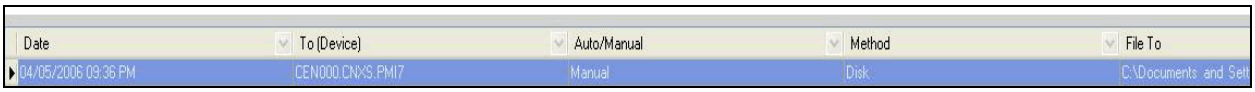


Figure 5-4. History Grid

Step	Result
5. Click [**Device**] and select the Device to which data will be sent. See Figure 5-5.	The Device name appears in the **Device** field.
6. Click [**...**] next to **File Location** to select where the file will be saved to. See Figure 5-6.	The **Browse For Folder** dialogue box appears.

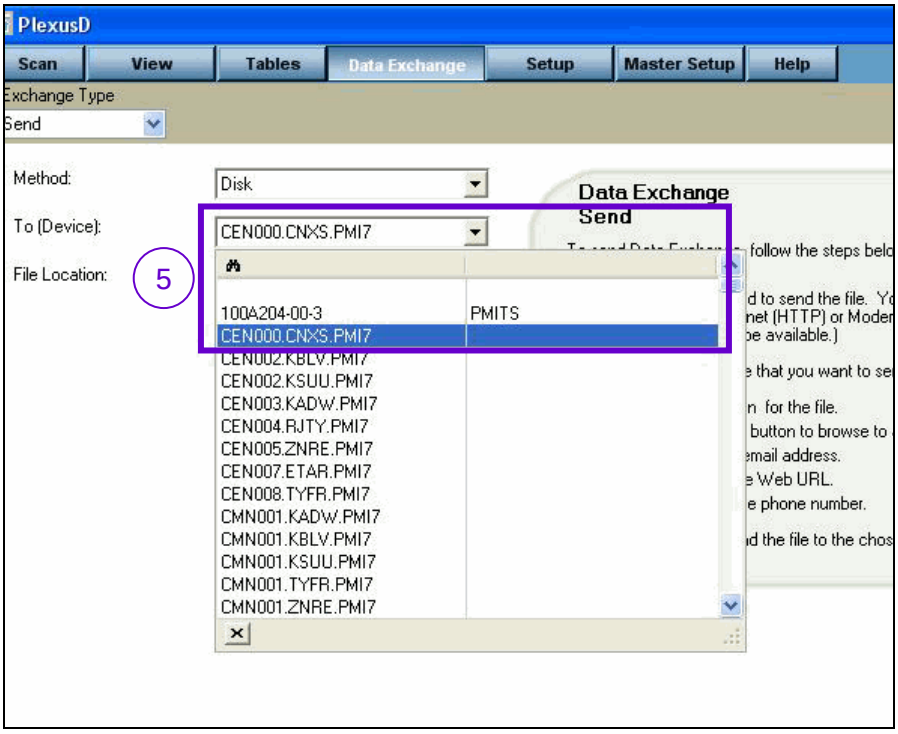


Figure 5-5. Device Name Screen

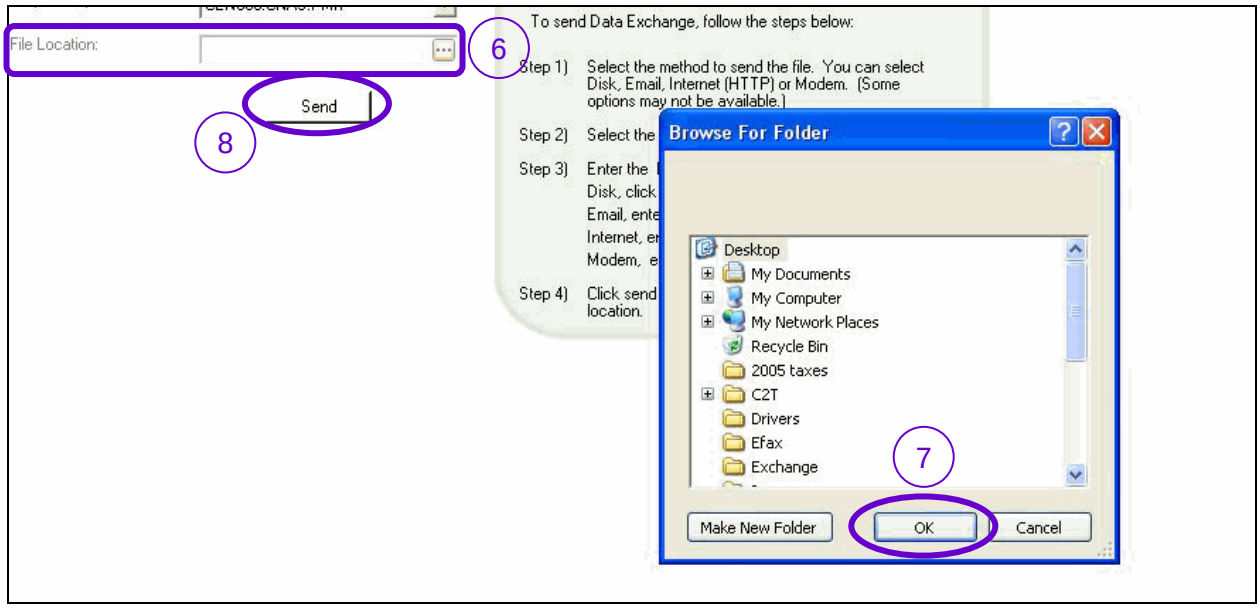


Figure 5-6. File Location and Browse for Folder Screen

Step	Result
7. Browse to the desired location. (If necessary, a new folder can be created.) Click the location and click [**OK**]. See Figure 5-6.	The dialog box goes away and the selected location is displayed in the **File Location** field.
8. Click [**Send**]. See Figure 5-6.	The bottom left-hand corner will show the progress of the file being created, the **Send Complete** box appears (see Figure 5-7), and the file appears in the history grid as shown in Figure 5-8.

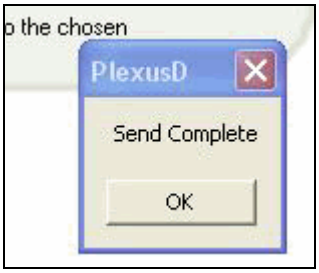
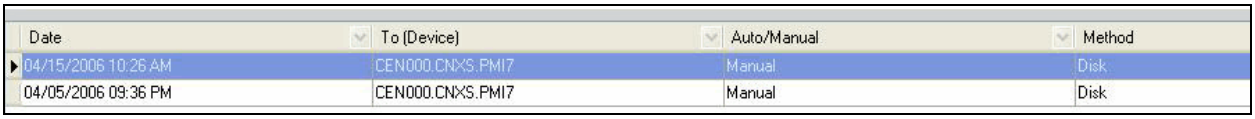


Figure 5-7. Send Complete Box



Date	To (Device)	Auto/Manual	Method
04/15/2006 10:26 AM	CEN000.CNXS.PMI7	Manual	Disk
04/05/2006 09:36 PM	CEN000.CNXS.PMI7	Manual	Disk

Figure 5-8. History Grid with File

4.2 Send Data Exchange File Via E-mail

Sending a Data Exchange file via e-mail requires internet access (on the laptop with the **PMITS PlexusD** application).

The Email settings must also be setup in the **Data Exchange** section in the **Setup** menu. For instructions on selecting the E-mail settings, refer to the DMLSS PMITS PlexusD System Administration Guide for the Workstation.

Follow Steps 1 and 2 above.

Step	Result
1. Click [**Email**] on the **Method** options. See Figure 5-9.	**Email** appears in the **Method** field.
2. Select the **To (Device)** from the drop down menu. See Figure 5-10.	The **To (Device)** selection appears.

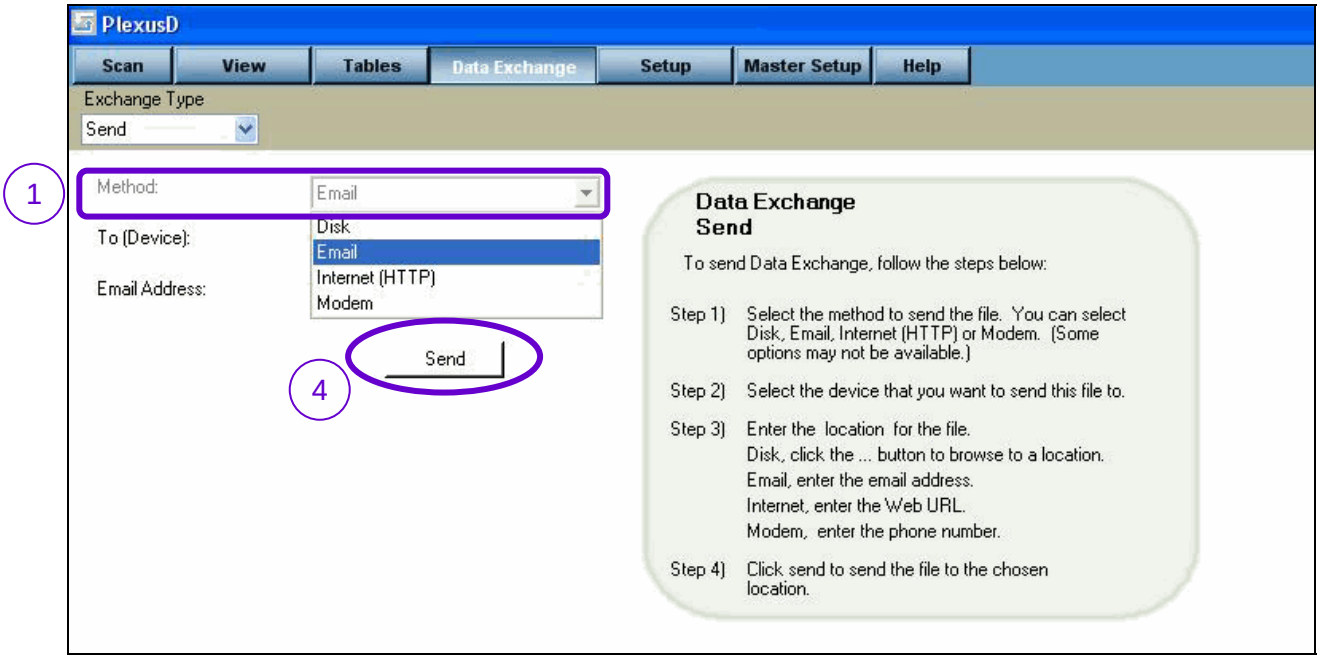


Figure 5-9. E-mail Option Selected on the Data Exchange Screen

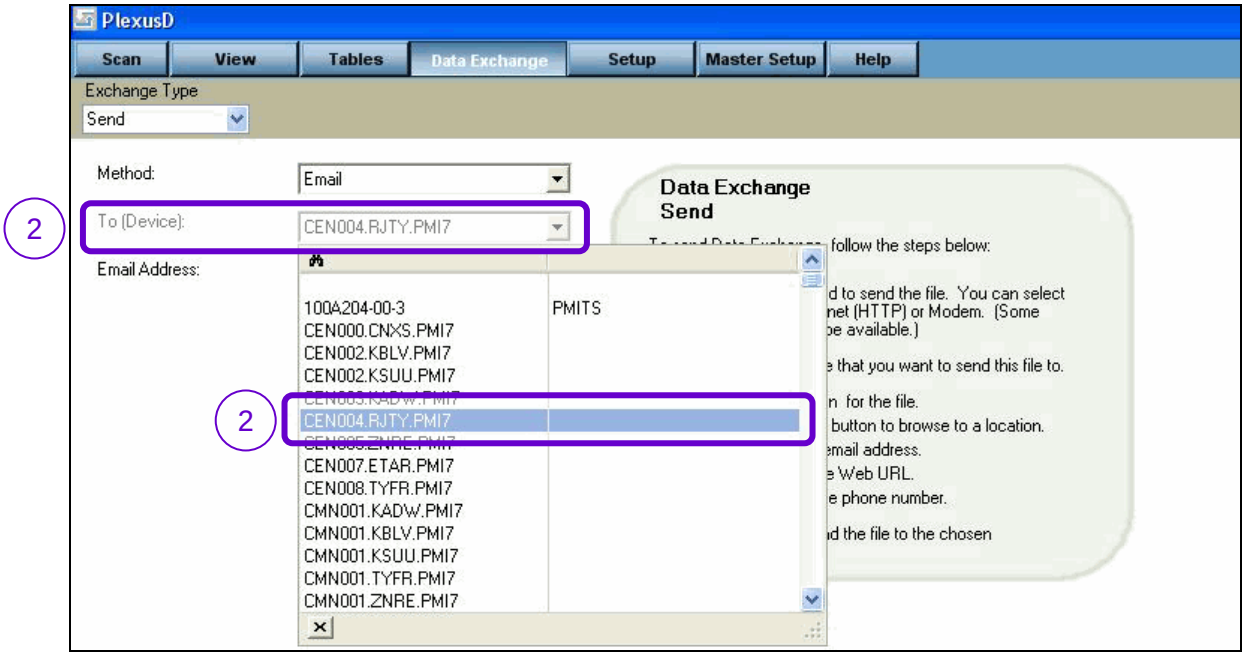


Figure 5-10. To (Device) Selection Made

Step	Result
3. Type the e-mail address in **Email Address**. See Figure 5-11.	The e-mail address appears in the field.

Figure 5-11. Email Address Box

Note: If the e-mail address has been setup for the selected device, the **Email Address** will populate automatically once the **To (Device)** is selected.

Step	Result
4. Click [**Send**]. See Figure 5-9.	The **Send Complete** box appears and the file is shown in the history grid.

4.3 Send Data Exchange File Via Internet

When you send a Data Exchange file via the Internet (HTTP), the application will also receive a file back from the device it is sending to during the connection.

The following are requirements for Internet exchange:

- The laptop must have an internet connection.
- You must know the appropriate Web URL to access the intended device.
- The **PlexusD Auto Transfer Program** must be running (The **PlexusD Auto Transfer Program** is discussed in the PMITS PlexusD System User Manual.).

Follow Steps 1 and 2 above in Section 4.1.

Step	Result
1. Click [**Internet (HTTP)**] on the **Method** options. See Figure 5-12.	**Internet (HTTP)** appears in the **Method** field.
2. Select [**Internet (HTTP)**] from the **To (Device)** drop down menu. See Figure 5-12.	The selection appears.

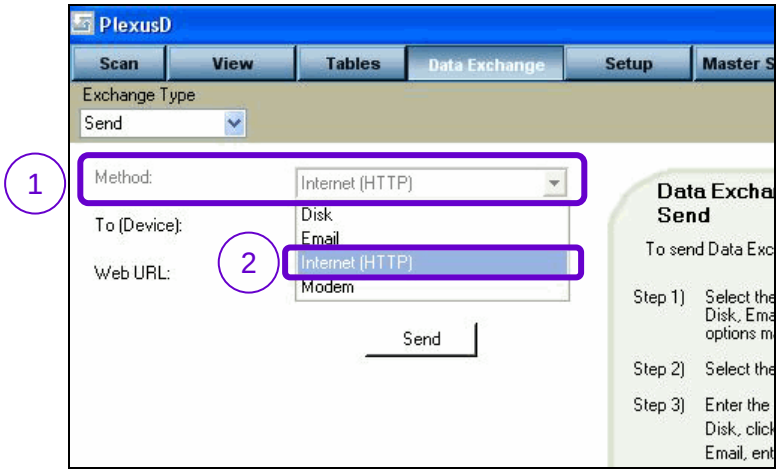


Figure 5-12. Method and To (Device) Selections Made

Step	Result
3. Type the Web URL in the **Web URL** field. See Figure 5-13.	The entry appears in the **Web URL** field.
4. Click [**Send**]. See Figure 5-13.	The **PlexusD Auto Transfer** window appears.

Note: The program will establish the HTTP connection, create the Data Exchange file, prepare to send, upload to the server, download the new server Data Exchange file, and import the received file. When the file is complete, a PlexusD message box will appear saying, **Send Complete**.

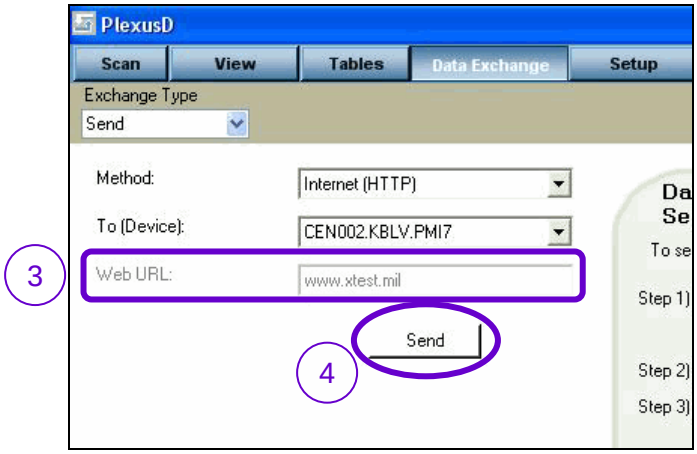


Figure 5-13. Web URL Selection

4.4 Send Data Exchange File Via Modem

When you send a Data Exchange file via a modem, the application will also receive a file back from the device it is sending to during the connection.

The following are requirements for modem exchange:

- An analog (non-digital) phone line must be connected to the laptop.
- You must know the appropriate number to dial to access the line and connect to the intended device.

- The laptop modem must be selected in the **Setup** section in the **Data Exchange** tab.
- The **PlexusD Auto Transfer Program** must be running.

Follow Steps 1 and 2 above in Section 4.1.

Step	Result
1. Click [**Modem**] on the **Method** options. See Figure 5-14.	The modem appears in the **Method** field.
2. Select the **To (Device)** from the drop down menu. See Figure 5-14.	The **To (Device)** selection appears.
3. Type the phone number in the **Phone Number** field. See Figure 5-14.	The number appears in the **Phone Number** field.

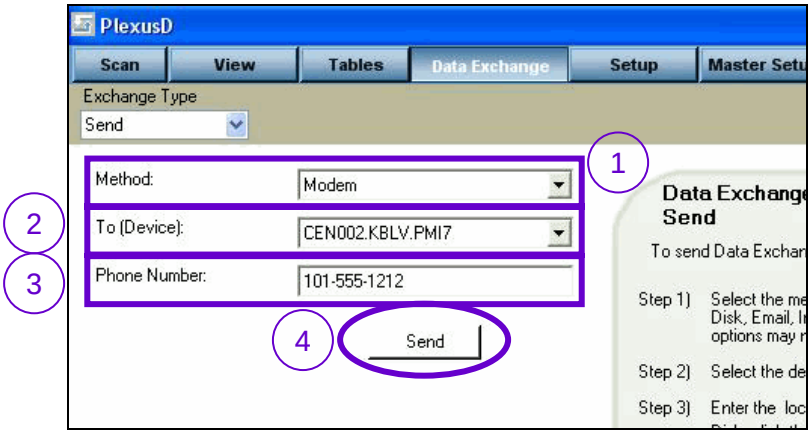


Figure 5-14. Modem and Phone Number Selection Fields

Step	Result
4. Click [**Send**]. See Figure 5-14.	The **PlexusD Auto Transfer** window appears.

Note: The program will create the file, prepare to send, dial, wait for connection, connect, send the file, receive a file, and import the received file. When the file is complete, a PlexusD message box will appear saying, **Send Complete**.

If the connection is not successful, the program will redial 5 times. If the call is still not successful, you can try again by resending.

4.5 Send Data Exchange File Via EF

Sending a Data Exchange file via EF is the same as sending a Data Exchange file via disk except that you will not choose the file location.

The file is automatically saved to the following location, "C:\Program\Files\PlexusD\PCOut\(DeviceID)" in a folder named to match the device ID for whom the file is being made. If the workstation is loaded with EF, the EF program will retrieve and deliver the file.

4.6 Receiving Data Exchange File Via Disk

To receive data from a disk, select the directory and Data Exchange file to be received and initiate the process. You are also notified when this process is complete.

If you are planning to receive a Data Exchange file directly from a USB drive, insert the USB drive into the workstation.

	Step	Result
	1. Click [**Receive**] from the **Data Exchange** drop down menu. See Figure 5-15.	The **Data Exchange Receive** screen appears.
	2. Click [**...**] next to **File Location**. See Figure 5-15.	**Select the file location** dialogue box appears as shown in Figure 5-16.

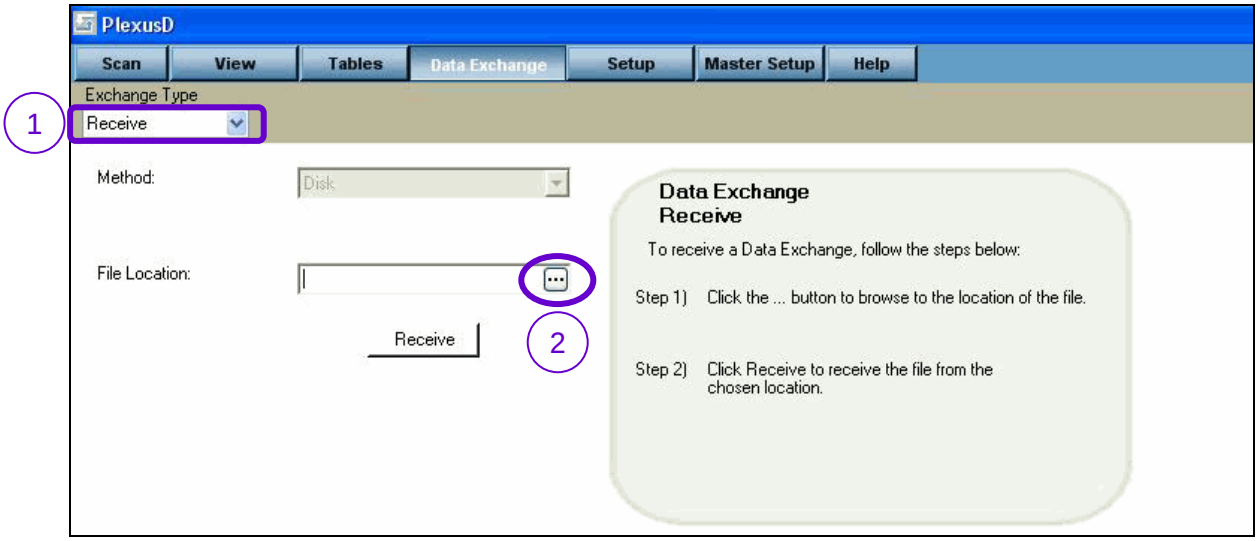


Figure 5-15. Receive Screen

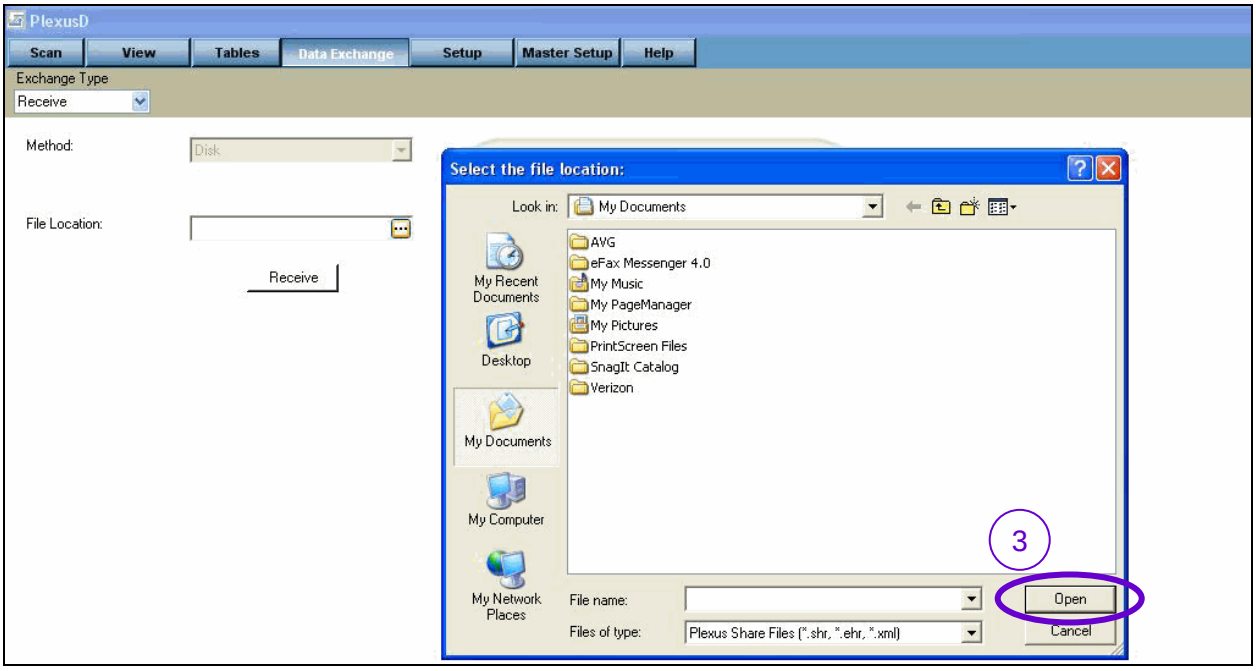


Figure 5-16. File Location Screen

Step	Result
3. Browse to the desired location, click the Data Exchange file to be imported and click [**Open**].	The dialogue box disappears.

Step	Result
4. Click [**Receive**]. See Figure 5-17	The bottom left-hand screen will show the file receive progress. When complete, the **Receive Complete** box will appear as shown in Figure 5-18.

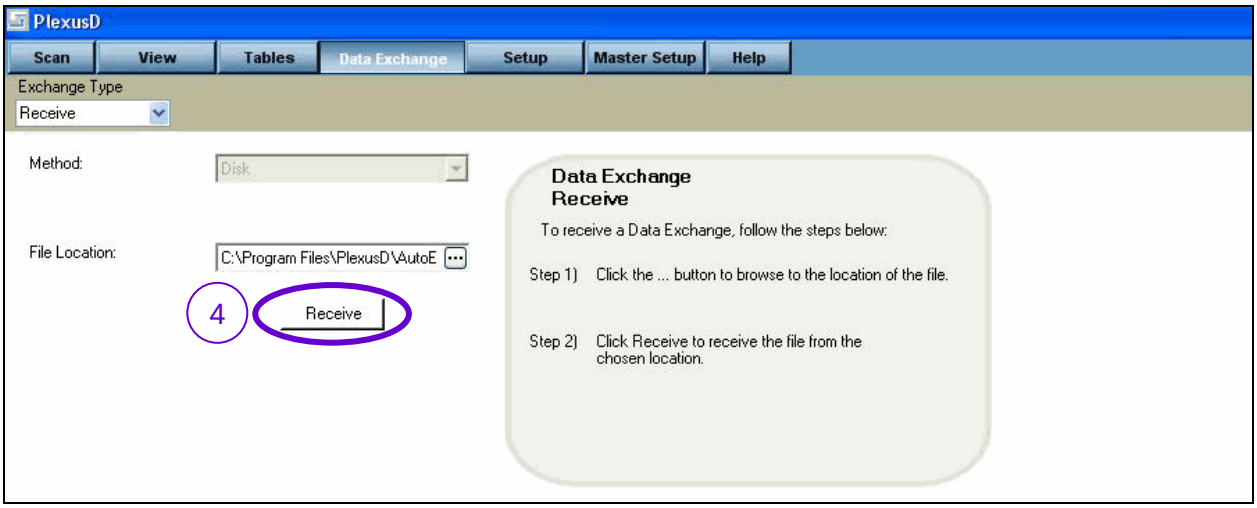


Figure 5-17. Data Exchange Screen with Receive Selected

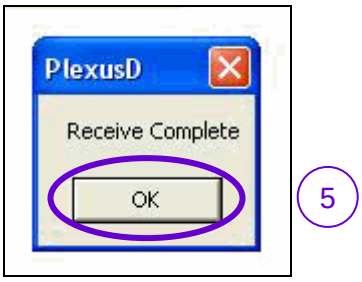


Figure 5-18. Receive Complete Box

Step	Result
5. Click [**OK**]. See Figure 5-18.	The dialogue box disappears and the history log displays the data in the grid below as shown in Figure 5-19.

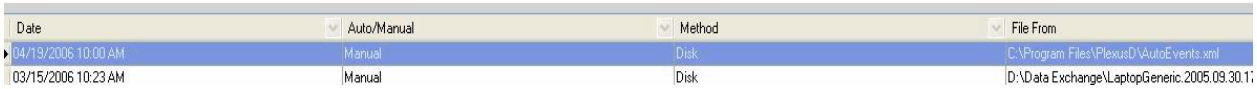


Figure 5-19. History Grid

4.7 Data Exchange History Grid

After you send or receive a Data Exchange file, send or receive information is displayed in the grid at the bottom of the page. The fields and description of each field for both the **Send** and the **Receive** grids are listed below.

Send Grid

- **Date** – The date and time the Data Exchange file was sent.
- **To (Device)** – The device that the Data Exchange file was sent to.
- **Auto/Manual** – If the Data Exchange file was sent manually (through the main menu button **Data Exchange**) or if the Data Exchange file was sent automatically (Automatic Data Exchange Send Events can be scheduled through the main menu button **Setup** in the **Data Exchange** tab). If the laptop receives a Data Exchange file via modem from another device, it sends a Data Exchange file back to that device during the connection. When this happens, **Auto (Modem Request)** will be entered in the **Auto/Manual** field.
- **Method** – The method that was used to send the Data Exchange file.
- **File To** – This field represents the location where the file was saved, sent to, etc.
  For disk method, **File To** displays the file location.
  For e-mail method, **File To** displays the e-mail address.
  For Internet (HTTP) method, **File To** displays the Web URL.
  For modem method, **File To** displays the phone number.
  For EF method, **File To** displays the file location.

Receive Grid

The receive grid is the same as the send grid (above) except that it does not include the **To (Device)** field.

4.8 Import a Descriptors File

The **Data Exchange** section of the program is capable of receiving a Descriptors file. A Descriptors file contains data to populate a newly installed system (it may also contain data that has been added to the system but has not yet been shared with all of the devices).

Use the same method as Receiving a data exchange file in Section 4.6 above.

5. Student Evaluation

5.1 Knowledge

Question 1: Describe two of the methods that can be used to exchange data files with other system.

Question 2: Describe the method for receiving data.

5.2 Scenario

Create a data exchange file for disk and list below the information that appears in the history grid for your action:

6. Conclusion

This lesson has discussed Data Exchange in PMITS PlexusD.

You have explored the following topics:

- The communications requirements of the PMITS PlexusD application on the workstation.
- Accessing the methods for exchanging data files with other users.
- Accessing the method for receiving data exchange files.

The PMITS PlexusD System Users Manual is also an excellent resource for information on all these topics.